

PATENT SPECIFICATION

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(54) GEARSHIFT LEVER FOR A VEHICLE

(71) We, DAIMLER-BENZ AKTIEN-GESELLSCHAFT, of Stuttgart-Untertürkheim, Germany, a Company organised under the laws of Germany, do hereby declare the 5 invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 The invention relates to a gearshift lever for a vehicle, especially but not exclusively a stick-type gear lever for a motor car. In passenger cars with a stick-type gear shift, the lever is usually disposed between the front seats, above which, in most cases, it projects to a considerable distance. Generally, also it is of a robust construction. Consequently in the event of a collision, especially if the driver or front-seat passenger is flung forwardly and obliquely from his seat, serious leg injuries often result. The invention seeks to provide a safer gearshift lever, reducing risk of injury to the driver and front-seat passenger.

15 20 25 According to the invention, a vehicle gearshift lever comprises a rod which carries a padded cap as the hand-grip knob, which cap comprises a knob part on the rod, a sleeve, embracing the said rod, which adjoins the said knob part and extends longitudinally of the said rod, and padding which covers the knob part and extends over the sleeve for a part of the length of the lever. The padding and the extension of the cap over part of the length of the lever reduces the risk of injury.

30 35 40 45 In a preferred form of construction, the knob part and sleeve are both surrounded by plastics foam material. Advantageously the knob part and the sleeve consist of a body of a polyamide material over which the foam material is produced. An integral type of foam is especially suitable for the dissipation of impact energy by conversion to deformation work.

One embodiment of the invention by way of example will now be more fully described with reference to the accompanying drawing, in which:

Fig. 1 is a partial elevation and partial section of the upper portion of a gearshift lever.

Fig. 2 is a side elevation thereof.

The gearshift lever consists in the usual manner of a round-steel rod 1 fitted with a padded cap 2 as the hand-grip knob. This cap 2, which extends over part of the length of the rod 1, may be pressed on to the rod 1 or, as is generally the case, screwed thereon by means of a thread 3 on the upper end of the rod.

Fig. 1 is a partial elevation and partial section of the upper portion of a gearshift lever.

The cap 2 comprises a thickened knob part 4 at the upper end of the rod 1 and, adjoining this part, a long guide sleeve 5. The sleeve 5 has a toroidal thickening 6 at its lower end. Both the knob part 4 and the sleeve 5 are surrounded by plastic foam 7. This construction reduces the danger of injury to the legs of the driver or front-seat passenger.

It is particularly advantageous if the knob part 4 and the sleeve 5 are made of a body of a plastics material, for example a polyamide material, over which a so-called integral foam material 7, for example polyurethane foam material, is produced and formed. By integral foam is to be understood a foam having a smooth outer skin and pores of increasing size towards the interior. Integral foam of this kind is especially suitable for dissipating impact energy by way of deformation work. It is preferable to use hard integral foam, which does not make it unpleasant for the driver to grasp the cap. The large, padded, cap 2 may be given a particular shape dictated by practical and/or aesthetic reasons, especially a shape suited to the driver's hand.

WHAT WE CLAIM IS:—

1. A vehicle gearshift lever comprising

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a rod which carries a padded cap as the hand-grip knob, which cap comprises a knob part on the rod, a sleeve, embracing the said rod, which adjoins the said knob part and extends longitudinally of the said rod, and padding which covers the knob part and extends over the sleeve for a part of the length of the lever. 15

5 2. A lever as claimed in claim 1, wherein the knob part and sleeve are both surrounded by a plastics foam material.

10 3. A lever as claimed in claim 2, wherein the knob part and sleeve consist of a body of a polyamide material over which the foam material is produced. 15

4. A lever as claimed in claim 3, wherein the foam material is an integral type of foam material.

5. A gearshift lever for a vehicle substantially as hereinbefore described with 20 reference to the accompanying drawing.

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Fig.1

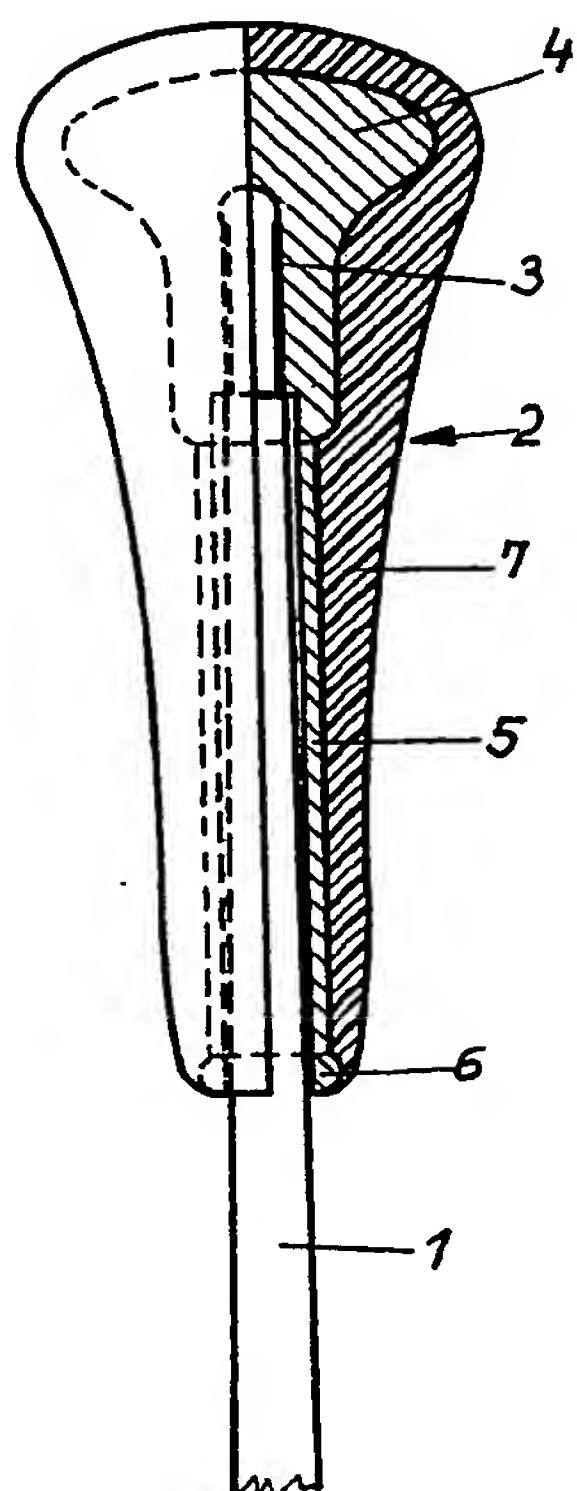


Fig.2

